

APPLICATION FOR HUMANITIES GRANT:

RESEARCH INTO THE MECHANICS OF THE INSTANTANEOUS GENERATION OF LUMINOUS COLOR

ABSTRACT OF PROPOSED RESEARCH:

After two years of research into programming light and sound for environment, we have developed a medium for artistic expression dependant upon electronic technology. Traditional art forms have suffered an increasing separation from our cultur's vocabulary of immediate experience: our work has dealt with direct programming of those physical energies--light and sound as opposed to image or music--through which perception itself occurs, thereby enabling us to stimulate and abstractly shape elemental psychological experience. Thus far we have experimented with a wide variety of light sources and have found luminosity which originates in an electrofied gas (e.g. fluorescent tubes, Xenon strobes) most plastically suitable as light and most readily programmable. All light used thus far has been chromatically restricted to the general area of white; though we have been long interested in color, we have found the effects of light which is colored by filtration unsuitable. We have formulated an area of possible experimentation in the immediate, programmable generation of a suitable variety of luminous color through the use of electro-luminescent materials which generate light of various color in response to power inputs at varying frequencies and amplitudes. In particular we propose a program of research using in association with our computer-programming device (see technical description): (1) electroluminescent paneling, (2) fluorescent tubes from which the fluorescing material is absent, and (3) liquid crystals. We are interested in large scale applications of these materials in which they comprise the total environment, and hereby solicit funds for special fabrication of the necessary materials and developmental experimentation regarding their use.

BUDGET: \$10,000